

# The Association between Dystemperament and Prevention of Diseases: A Systematic Review

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## ABSTRACT

**Introduction:** Temperament or mizaj is referred to four different humors differentiating individuals and as a result, proposing different preventive measures for their diseases.

**Aim:** In this study, a systematic and purposeful review with emphasis on the research question was done to retrieve, evaluate and consolidate the required information.

**Materials and Methods:** Computerized search of published original articles with fulltext was performed using PubMed and Web of Science, Medline data Science direct, ProQuest, SID and Cochrane Library bases as well as local references from March 1990 to March 2016. The key terms used were “temperament”, “Dystemperament”, “prevention”, “health promotion”, “sue mizaj”, “treatments” and “preventive measures”, “preventive medicine”. Original and translated books were also used. Out of 25 articles, 9 were selected.

**Results:** The findings of this study indicated that there are six essential factors (asbab-e-sitlah Zarooriya), in preventing

diseases which includes air, water, food, rest and improvement of body, soul and mind, sleeping and awakening, retention and discharge of fluids, solids, gases and energy from the body and based on the aforementioned causes, some Tadbeer were introduced as Tadabir-i-Nafas (air), Tadbeer-bil-food, Tadbeer-bil-drinks, Tadbeer bil-exercise and physical relaxation, Tadbeer-bil-sleep and wakefulness, Tadbeer bil-retention and discharge.

**Conclusion:** There are two differences between these two kinds of medicine; firstly, although some preventive factors are overlapped in traditional and mainstream medicines (including nutrition (both food and drink), physical activity and sleep), some of the traditional preventive factors become undelined (retention, air) and some new preventive factors get highlighted in mainstream medicine (e.g., not smoking, not having stress, ...); secondly, rules of preventive medicine in Unani system were mentioned in detail and were different for different people with different types of temperament, while the mainstream medicine states its rules, generally for different types of people.

**Keywords:** Alternative medicine, Complementary medicine, Traditional medicine

## INTRODUCTION

Temperament of a person is mostly related to identifying the most proper diet and lifestyle for health promotion [1]. According to Hippocrates, “it is more important to know what sort of a person has a disease rather than to know what sort of disease a person has” [2].

There are four essence of the body. Blood which is hot and moist, phlegm which is cold and moist, bilious which is hot and dry and atrabilious which is cold and dry. Any problem within one of these essences should be treated according to the moisture and temperature characteristic of the essence [3]. Muinuddin and Chishti argues that nearly all of the eastern medicine techniques uses this idea of four essences of the body while western medicine totally disregards it [4]. On the basis of Mizaj, human beings have been categorized into four qualitative types: Sanguineous (Damvi), bilious (Safravi), phlegmatic (Balghami), melancholic (Saudawi). They were suggested to result from predominant humor in the body [5,6]. Temperament of the body is specific for each individual fluctuating between certain minimum and maximum limits. Any change in the temperament of a person brings about a change in persons' state of health [7-9]. Thus, preservation of balanced temperament under the differing conditions of life is vital for the maintenance of health and avoidance of disease in an individual. Arabic medicine is in agreement with the Greeks and Romans on the same, that the deviation of the health spectrum from positive health to diseased condition and death largely depends on the equilibrium and ratio of four humors viz., phlegm, sanguine and melancholic humors, disturbance in original (genetic or congenital) temperament, change in bodily composition, size

and putrefaction(taafun) [10]. Some factors including age, place, season, diet and occupation possess their certain temperament that are in charge of affecting the individual temperament and make them prone to a particular group of diseases. Thus, the people of specific temperament predispose to specific kind of diseases in different stages of their life and under different climatic conditions [5,7,8].

Medicine is divided into two branches viz., curative medicine and public health (preventive medicine). It was said that the essence of medicine is prevention. This is in conformity with the Arabic tradition believing that the guardian, protecting and preserving personal well-being is considered better than medical treatment [11]. According to Traditional Iranian Medicine (TIM), health preservation and disease prevention are prior to disease treatment [12]. Besides, in Unani system of medicine, it is generally said that ‘prevention is better than cure, so a specific prevention plan for each disease must be structured as per Greek-o-Arabic norms [5]. Nevertheless, before making the prevention plan, one must understand the Greek-o-Arabic aetiopathology of the disease [5].

Ayurveda focusses on the preventing and promoting health, resulting from a holistic approach of this system, its widespread use would boost the health status of the people around the world [13]. Ayurvedic approaches to therapy includes: 1) Diet: foods should be consumed slowly, in their natural season in tranquil surroundings; occasional fasting is thought to promote health; 2) Medicine: the primary therapeutic and preventative arsenal is based on herbal remedies, which may be supplemented by homeopathy and conventional drugs. Practical-behavioural modification, breathing exercises, mental counseling, enemas, transcendental meditation, yoga and a healthy lifestyle [14,15].

In Unani system of medicine, prevention plan consists of limiting the toxins accumulation through proper adjustment of the person's six governing factors [16,17]. Unani medicine is well-known for preventing diseases including gastric ulcer, hepatitis, ischemic cardiovascular disease, hypertension, diabetes mellitus, sexual debility, renal stones, vitiligo, psoriasis and paralysis via its dietotherapy [1].

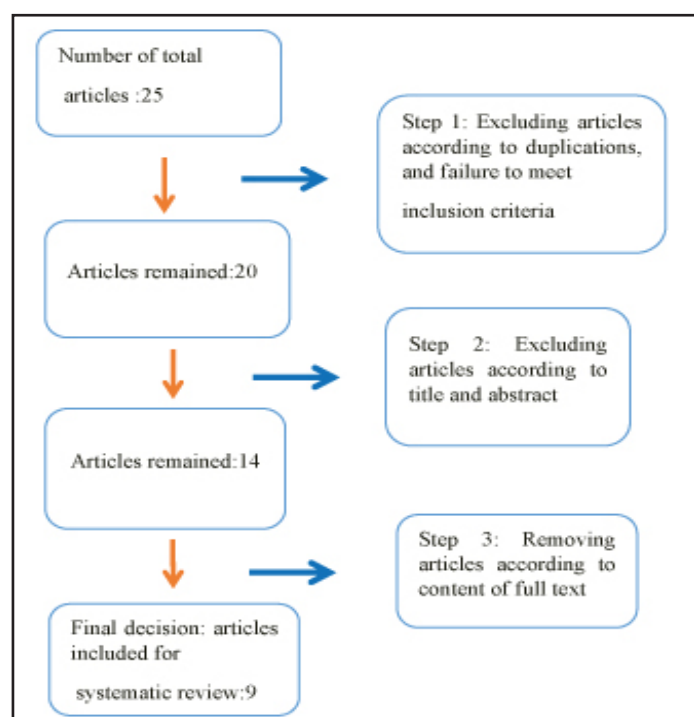
Public health (preventive medicine) includes correction in asbab-e-sitlah Zarooriya (six essentials of life) and implementation of asbabe-gheire Zarooriya. Six essentials of life includes air, water, food, rest and improvement of body, soul and mind, sleeping and awakening, retention and discharge of fluids, solids, gases and energy from the body. The above-said factors are causes that influence every human being. Depending on circumstance, the following may be added namely: geographical conditions; residential environment; occupation and related matters; habits; age; gender. Asbab-e-gheire Zarooriya includes adoption of all healthy behaviours and life style including riazat (special exercise), hammam (bath house), taleeq(leeching), venesection(phlebotomy), mahajim and so on [11]. Asbab or Cause is the first thing that make states or durability in the human body. Each of the three body states have a special cause. There are three kinds of causes: primary causes, physical causes and the former cause. Every cause is either necessary or unnecessary. Unnecessary cause is either contrary to nature (human allegiance) or it has no contradiction with it [18].

In a book entitled taqwiyam alsihha (tables of health) consisting of 40 tables, Ibn buTlaan set the conditions under which health could be preserved. According to him, health depends on the proper balance between six areas: the elements and air, food and drink, movement and rest, sleep, bowel movement, emotions: joy, anger, fear and distress [19].

## MATERIALS AND METHODS

### Search Strategy

**Investigation strategy:** This systematic review has reviewed association between dystemperament and prevention of disease. The major questions of the present study were: "what are the major findings of the studies reviewed for factors involved in the association between dystemperament and prevention of disease?"



[Table/Fig-1]: Process of selecting articles for review.

### Data collection was performed by four inclusion criteria:

1) Published within the past 26 years (March 1990-March 2016); 2) Published in English and Persian languages; 3) Published in trustworthy peer-reviewed scientific journals; and 4) Occurrence of the keywords in titles or abstracts. The following words were used independently and later as combination to search for in databases and electronic journals. According to the inclusion criteria 25 articles were retrieved. First, the articles which did not comply with inclusion criteria or were duplicated were ruled out (n = 5). Secondly, some articles were ruled out on the basis of title and abstract (n = 6). In the third step the full text of the remaining 14 articles was read and 5 articles were ruled out based on the content of articles. In the final step, 9 articles in English were finalized out and their full texts were reviewed and analyzed. The process of selecting articles for review was systematically performed in three steps [Table/Fig-1]. Exclusion criteria: Relating to treatment of disease instead of prevention, just abstract was available, not in the time line of study. Those article which did not match our inclusion criteria (relating to prevention of disease, between the time line of study) were excluded from the study.

## RESULTS

Necessary causes are six that are called asbab-e-sitlah Zarooriya that are as follows [18,20].

**1) Air:** Air the use of which is inevitable because its inhalation causes balance of soul and its exhalation causes removal of waste from the body and as long as the air is clean and moderate and is not mixed with steaming swamps, landfills, stagnant and foul-smelling water, steam of rotten vegetables and fruits, foul-smelling trees such as yew and fig, the dust and permanent smoke it promotes health. Climatic change may be normal or abnormal; abnormal changes may be compatible or incompatible with the nature. Natural variation includes seasonal changes, and every season has a special cause for the spread of some diseases. Besides, in each seasons some of diseases are diminished. However, abnormal changes that are not hostile to human nature have heavenly or terrestrial cause. Cold weather strengthens the body, improves digestion of food and colour of skin, triggers special diseases including epilepsy, paralysis and catarrh cold and trembling. Hot air causes lethargy, weakness, poor digestion of food, blurring of the senses and heaviness of the brain and its specific diseases include croup, different types of fever and eye pain. But climatic changes that are incompatible with the normal process of a region cause epidemic diseases.

**2) Food and Drink:** These two affect the body either through their effects on body that in this case is called "medicine" or their impact is ones due to their substance that in this case are called "food" or due to their forms that in this case have either a positive effect in the body (antidote) or against the body (such as pesticides) or influence through their substance and quality that in this case is called "medical food" or affect through their form and quality that is named "zol-al-khase medicine" or affect via their substance and form that called "medical food". Food may be either subtle, medium or thick, and each of the three cases may be saleh-al-keimos or fasd-al-keimos and each of them may be full calorie (kasir-al-taghziye) or low calorie (ghalil-al-taghziye). Water has no nutritional value because of the simplicity of its structure, it is only used to dilute foods, to cook and helps to penetrate the tight ducts of body. Savory delicious foods cause hotness of the body and cold foods can cause digestive problems and coldness of body [2,20]. Besides, to have a healthy body, one must have a diet consisting of a balanced amount of both hot and dry foods [4]. The Sufis separate foods into eight categories. Four of these categories are for hot foods while the other four is for cold foods. The four hot and the four cold categories are distinguished by their degree of hotness and coldness [4].

	Tadbir	Prevention
Sanguineous (hot and moist) temperament	<ul style="list-style-type: none"> <li>• Keeping cool in hot weather and warm in wet weather.</li> <li>• A diet that contains equal amounts of protein, fruit/vegetables and salads.</li> <li>• Seafood is excellent.</li> <li>• A 15 to 30 minute morning walk or jog.</li> <li>• Gardening and aerobic exercises.</li> <li>• Six to seven hours sound sleep. Early to bed and early to rise is best for everyone but especially for the sanguineous temperament.</li> <li>• During summer, a half an hour rest or nap after lunch is very beneficial.</li> <li>• Maintain a high fiber diet for regular bowel movements.</li> <li>• Increase your water intake for optimum kidney function.</li> <li>• Cupping or blood donation 2-3 times a year reduces the excess blood dominance in a sanguineous person-this is preferable in summer or spring.</li> </ul>	<p>Weather, environment, work and leisure activities that increase heat and moistness. Inadequate rest and strenuous exercise. Sleeping more than 8 hours or less than 3 hours a night. Worries, anger and excessive excitement. A large intake of white flour products as this will result in irregular bowel movements. The colon should be kept clean.</p> <p>In order to remain healthy, they should adopt the following lifestyle factors:</p> <ul style="list-style-type: none"> <li>• Avoid staying for long in hot and moist air. They can tolerate cold easily.</li> <li>• Winter is the best season for damvi mizaj persons.</li> <li>• They should preferably drink cold water and avoid excessive sugar, rich fatty foods and meat consumption.</li> <li>• They should use barid-yabis foods.</li> <li>• These persons should avoid foods which produce undue agitation and disturbances of humour.</li> <li>• Exercise should be so gentle that there is no over production of heat in the body.</li> <li>• Eliminative measures such as venesection and purgation should be carried out early in spring.</li> <li>• They should gargle with decoction of Mastagi, Habbulaas, and Aaqirgarha for the evacuation of morbid matter present in the brain.</li> <li>• Damvi mizaj persons are more susceptible to infectious diseases. So, they should use such drugs which have daftaffun action.</li> <li>• Excessive excitement, worry, anger or emotional excesses should be avoided [10].</li> </ul>
Bilious (hot and dry) temperament	<ul style="list-style-type: none"> <li>• Fresh air and a cool, properly ventilated environment.</li> <li>• Including more fruit and vegetables than meat in your diet.</li> <li>• Increase your daily water intake.</li> <li>• A good night sleep of 6-7 hours and a one hour nap after lunch in summer is beneficial.</li> <li>• Meditation and breathing exercises are helpful during times of emotional turmoil.</li> <li>• Exercise in the early morning and late afternoon</li> </ul>	<p>1-Weather, environment, work and leisure activities that increase heat and dryness. 2-excessive intake of alcohol, tea and coffee. 3-excessive movement and strenuous exercise. 4-lack of sleep (less than five hours on a regular basis) and late nights. 5-extreme emotions of anger, excitability, irritability, excessive speech and suppression of anger. 6-an excess of a hot and dry diet (chart 1) especially in hot weather.</p>
Phlegmatic (cold and moist) temperament	<ul style="list-style-type: none"> <li>• Having only one or two full meals daily. Because of your low digestive ability, phlegmatic people should make a habit of eating two main meals per day and there should be at least at 10-12 hour gap between meals. If you feel hungry in-between meals, eat a little fruit or salad. The food should be high in fiber and protein including eggs, meat, sea foods and liver. In winter on a cold and rainy day or at night, cold foods should be taken in smaller quantities as these increases phlegm.</li> <li>• Starting the day with a glass of warm water with two tablespoons of honey.</li> <li>• You must have 1½ to 2 liters tap water per day but avoid drinking water half an hour before and up to one hour after meals.</li> <li>• Exercise on a daily basis.</li> <li>• Breathing exercises for 10 to 15 minutes in the morning.</li> <li>• At night a 15-20 minute brisk walk after supper is very beneficial.</li> <li>• Retiring early for your required 8 hours sleep. As sleep promotes moisture and is also the temperament of phlegmatic people, they have a tendency towards excessive sleep. Rising before sunrise is advised to avoid an excess of phlegm. Do additional activity to supplement body heat.</li> </ul>	<p>Weather, environment, work and leisure activities that increase cold and moistness. Because of the low heat, phlegmatic people are particularly vulnerable to a cold environment as well as cold and rainy weather. Heat management through proper clothing and seeking a warm environment cannot be stressed enough. Excessive rest and a lack of exercise and movement. Unnecessary rest during the daytime should be avoided. Sleeping during the day and especially one hour before sunset is very harmful as this aggravates the phlegm and leads to heaviness of the head, sinus congestion and dullness of the brain. Fear, shyness and depression are the emotional excesses of phlegmatic people and should be managed accordingly. A diet low in calories and nutritional values, with no proteins and fats but high in carbohydrates. Menstruating women should avoid a cold diet. This also applies to women who have given birth (one month post-natal period).</p>
melancholic (hot and moist) temperament	<ul style="list-style-type: none"> <li>• Breathing exercises in the early morning and late afternoon.</li> <li>• Protecting yourself in dry weather by applying a moisturizer, cream or oil (olive oil) to the skin.</li> <li>• A hot and moist diet and drink are more likely to be ingested. A 10-15 minute walk after supper is beneficial. Water intake should consist of at least 2 liters a day.</li> <li>• Exercises like jogging and a brisk walk. Change of environment (pinics, etc) every 2-3 months is beneficial. Meditation is very helpful in most melancholic psychological problems.</li> <li>• Getting to bed early, around 22:00 to get 6-7 hours sleep. Napping for half an hour after lunch is also beneficial.</li> </ul>	<p>Weather, environment, work and leisure activities that increase coldness and dryness. in autumn keep away from the cold of night and the midday heat. Dewy conditions during autumn, late winter and (00:00 to 06:00) as this aggravates the melancholic humor. Too much tea, coffee, sourdrinks, artificially flavored and fizzy drinks. Too little water. Use of ice and too many iced drinks. Eating colder than warm food. Using frozen of refrigerated foods and drinks. Excessive waking during the night. Excessive worries, sadness, loneliness, thinking and being overly philosophical. Unnecessary suppression of stools and urine. Excessive use of anti-allergic, antipyretics, antihistamines and other cold and dry medications.</p>

[Table/Fig-2]: Health maintainance for four different mizaj or temperament.

**3) Physical exercise and rest:** Sports are different in terms of intensity and weaknesses, frequency and speed. Strong and fast and little exercise is more warming than degenerative and low speed, weak and much exercise is reverse. Excess in exercise and rest causes body to cool. Rest helps improve digestion, while exercise help in better absorption of foods [20,21].

**4) Movement and mental relaxation:** The spiritual movement requires movement of the soul outside or inside. Movement of soul outside may be sudden (such as extreme anger) or gradual (such as happiness or pleasure), and its movement inside may also be sudden (such as fear) and or gradual (like sadness) [20].

**5) Sleep and wakefulness:** Sleep is similar to rest and waking is closer to movement. Sleep can crawl into the spirit of the body that is why the body becomes cold. That's why more clothing is required during sleep. Excessive sleep causes body moistness and coldness. On the other hand, lack of sleep triggers spiritual coldness. Too much sleep cause weakness of brain and gastrointestinal dyspepsia resulting from digestive power as well as hunger. Daytime sleepiness is harmful for both skin and spleen.

Moreover, it causes halitosis and lethargy. However, if it is formed as an addiction, so it should be gradually allowed to quit. Although successive sleep and wakefulness is detrimental [20].

**6) Evacuation and retention:** Whenever it is enough, it will be helpful and protective for the health. However, excessive evacuation cause dryness and coldness of body unless the substance be cold and dry that in this case, its vomiting cause warmness and moistness of body. Excessive retention cause incidence of serious infections, loss of appetite and heaviness of body. However, unnecessary but compatible causes, such as being buried in the sand, and rolling in it causes drying the useful moisture and is helpful in the treatment of edema and paralysis (in fact, these methods are some type of vomiting). Oil rubbing on body with oils like olive oil has the same effect. Washing your face with cold water also cause increase in the intrinsic warmness and it's boosting and is helpful in the treatment of condition resulting from staying too much in bath. But some causes are incompatible with the normal process of life, such as drowning, deep cuts, burns and toxic smoke [2,20].



Temperament	Regimen
Bilious (hot and dry)	Exposure to sun or hot climate should be avoided. They should live in a cool, fresh and properly ventilated environment. Winter season is beneficial for these persons, while they get trouble in summer, because bile increases in this season. So, Mukherjee and Mushile safra drugs should be used by these persons in summer like sikanjabeen, tamarhindi, Aalubukhara, Guleneelofar, Gulebanafsha etc. - They should use barley water during summer season. Massage with Roghan banafsha should be done in these persons. - Persons of safravi mizaj should avoid hammam. They should take meals three times a day. They should avoid salty, fatty and fried foods and Ratab foods should be used by these persons like Cucumber, Water melon etc. They should avoid excessive movement and strenuous exercise, time of exercise should be early in the morning or late in the evening. A good night sleep is essential for such type of temperament. Extreme emotions of anger, irritability, excessive talkativeness, and suppression of anger are emotional extremes for this kind of temperament. Bile should be eliminated with emesis, purgation or both according to individual disposition. For purgation, banafsha, tamarind, halelazard should be given [10,11].
Phlegmatic (cold and moist) temperament	- Cold air negatively affects them hence air conditioners and cold and wet environment should be avoided. - They should use hot and dry foods and avoid cold foods. - Lack of exercise and unnecessary rest during day time especially one hour before sunset should be avoided. They should indulge in strenuous exercise for longer duration. Aerobics is beneficial for them. - They should get up early in the morning and avoid sleep after sunrise. - Fear, shyness, depression are the emotional excesses for this temperament which should be managed accordingly. - Sweating is beneficial, it should never be suppressed and laxatives are also beneficial [2,3,8,14].
Melancholic (hot and moist) temperament	- IbneRushd has advocated Dalaklayyan, mild exercise, long sleep and har-ratab foods for these persons. - They should avoid staying in cold and dry environmental conditions for long. They need to be protected in dry weather conditions. Seashore and coastal areas are beneficial for their health. - Melancholic should avoid old, dry and stale food, excessive beans, nuts, astringent foods, peanuts, tomatoes, brinjal and rancid fats are harmful for them even in small quantities. - Tea, coffee and artificially flavored drinks should be avoided. - Har-Ratab foods should be given to these persons like anjeer, maveez, Chana, lobiya, apple, anarshirin, turnip, ginger etc. - Moderate and light exercise for short durations is best suited for such temperaments; especially walk for 15 minutes after dinner. - They should go to bed early for 6-8 hours night sleep. They are more prone to insomnia. - Feeling of loneliness, depression and grief can have much more negative influence especially if prolonged or excessive. - They should drink at least 2-3 litres of water daily. - Bodily wastes like urine and stool should never be suppressed. - Sauda should be evacuated from the body. For this purpose halelajat and bisfaij should be used [8-11].

[Table/Fig-3]: Different kinds of temperament and suggested regimen.

The aforementioned four causes are related to single sue mizaj and their combination caused compound sue mizaj.

Health maintenance for four different mizaj or temperament are shown [Table/Fig-2] and different kinds of temperament and suggested regimen was offered [Table/Fig-3]. Based on the aforementioned causes, some Tadbeer were introduced as below:

**Tadabir-i-Air:** It aims to allow timely prevention and management of complications [20].

**Tadbeer-bil-food:** Maintaining the health of each person must be done according to his mizaj and it should be prescribed the material whose quality is the same as one's own mizaj. Trying to change ones mizaj to a better mizaj is detrimental for him [12,20].

Medical foods should not be consumed unless the management of mizaj or adjustment of food of an individual is concerned. In addition, it should be avoided to consume foods without having appetite. Besides, it should not be fought with real appetites. It is necessary to eat cool foods in summer and warm foods in winter. Eating foods before previous food is digested is very disadvantageous and too much indulging is placed in the next step. Colourful foods makes the individuals mizaj mixed up.

Food of bilious individual should be cold and moist. While food of sanguineous person has to be very cool. Food of phlegmatic person should be soft and hot and melancholic person should consumed moist foods.

The combination of certain foods were forbidden by experts because the concomitant use of these leads to chronic diseases such as leprosy and polio. Although, it is difficult to prove many of them by analogy.

**Tadbeer-bil-drinks:** It was said that well water and spring water should not be consumed together unless one of them had been absorbed. The best of water is water of streams especially those running on clean and free from pollution soil and on rocks. These kinds of water are rarely infected if running from north or east and from the top down and be away from original source [20].

Spring water is free from any bad temperament and worse than that is water wells the worst is water of ponds. It is best to drink water after the beginning of food digestion. Drink waters after food consumption avoid burning of food in digestive system and

drinking water during eating is even worse. But it is beneficial for those whose mizaj is hot. Some people have poor appetite and drinking water cause to offset the heat of their stomach and enhance their appetite. Drinking water is very harmful while fasting, following exercise, especially after sexual intercourse, after taking strong laxatives and after eating fruits, especially melons, after taking shower. In many cases, the thirst feeling is resulted from viscous or bitter phlegm. Thus, the more water you drink, the more thirsty you will feel. In such cases, it should be resist against thirst until the nature cooked and melted the thirst substance. In this condition, thirstiness will be removed. In many of such cases, thirstiness will be disappear by consuming hot material like honey [20].

**Tadbeer bil-exercise and physical relaxation:** As we know, the body's survival is impossible without eating. On the other hand, the food does not absorb completely, but in every digestion, some amount of food will remain in gastrointestinal digestive system. If these material increase gradually over time, some kind of materials will be produced that are harmful in two ways [20]:

1) First, they affect the quality of foods as they increase the temperature of body without any cause or by causing infection or causing decrease in the temperature of body without any cause or by removing natural heat of body [20]; 2) Second, they affect the quantity of foods that cause obstruction and heaviness of body as well as causing retention disease. So, it is clear that both remaining and vomiting these waste in body is disadvantageous. The main barrier of producing this kind of waste material is movement that cause heating body members and running the waste material in them, in this way, avoid their accumulation over time. On the other hand, exercise makes the body carefree and happy. It makes body ready for the reception of food. As well as increase in resistance and strength of joints, ligaments and nerves. Along with other therapeutic measures, exercise makes body immune against different kinds of temperamental and material diseases [20]. Protective role of exercise against chronic diseases such as cardio- respiratory diseases, diabetes, and hyperlipidemia etc., was investigated and proved [22,23]. The most appropriate time to exercise is deemed after food digestion and absorption [20].

**Massage is of different kinds:** Soft and hard massage. Massage with rough hands can flush skin and is refreshing, hard massage trigger to strengthen the weak limb while the soft massage will

cause their weakness. Too much massage cause slimming and mild massage cause obesity. The important point in massaging is that it should be done by several persons simultaneously [20].

**Tadbeer-bil-sleep and wakefulness:** Deep, continuous and adequate sleep is the best type of sleep that begin to take place after digestion and the absorption of food and reduction of bloating caused by of food. A person who sleep to help digestion of food, should scratch on the right side first in order that food be placed in the bottom of the stomach then lie on ones left side for a long time because in this case, liver cover stomach and keep it warms. After the digestion of food, one should lay down again to the right side in order that food be better absorbed by the liver [20,24].

**Tadbeer bil-retention and discharge:** There are 10 indications which show when it is right to procure "evacuation" (i.e., bloodletting, wet-cupping [25], purgation, enemas, diaphoresis, use of leeches, etc.): 1) Plethora; 2) vitality; 3) temperament; 4) appropriate symptoms (thus, we need not evacuate the bowel in a case of diarrhea); 5) habit of body or physique; 6) the age of the patient; 7) the time of year; 8) the state of atmosphere; 9) the geographical situation; 10) the patients mode of life regarding "evacuation"; and 11) his occupation [26]. The individual nature should be always noted in a way that the nature retention can be done by a fatty stew, white soups and soups containing lemon and Safflower. Some of the most common kinds of vomiting (retention way) in healthy person is hammam and sexual intercourse. It must be noted that entering into the warm bath and the exit from it should be done gradually. Staying too much time in the bathroom cause epileptic, boring and dry. A person with dry mizaj should use bath water more than its air and in such cases it is necessary to sprinkle the floor and walls of the bathroom, in order to evaporate the water and makes it air vapory. A person with moist mizaj should use more air than water in hammam and it is required to sweat before using the water. It is also correct about those patients with oedema. As long as skin is refresh, no excess in hammam take place. But when the skin begins to wrinkle and person's tiredness increase, it is a sign of excessive bathing.

**Sexual intercourse:** The best time for that is after digestion of food and when the body is in moderation in terms of heat and cold, moisture, dryness and fullness and if it is done in inappropriate time, its harm during fullness of body is lesser than when the body is empty and cold and dry. It is recommended that sexual intercourse is done due to the increased intensity of passion and intense sexual desire and then the person become sleepy. Intercourse in moderation sparks body with instinctive warmth and prepares body to absorb food and is helpful to overcome the phlegmatic and melancholic diseases [26,27].

A brief comparison between traditional and mainstream preventive medicine. While unani medicine focus on the four essence of life and six governing factors, mainstream medicine introduce three types of prevention: primary prevention, secondary prevention and tertiary prevention. Based on the MeSH, Primary prevention is defined as specific practices for the prevention of disease or mental disorders in susceptible individuals or populations. These include health promotion, including mental health; protective procedures, such as communicable disease control; and monitoring and regulation of environmental pollutants. Secondary prevention was defined as early detection of disease process and application of interventions to prevent progression of disease or the prevention of recurrences or exacerbations of a disease or complications of its therapy. Tertiary Prevention is also defined by MESH as measures aimed at providing appropriate supportive and rehabilitative services to minimize morbidity and maximize quality of life after a long-term disease or injury is present. While factors including age, place, season, diet and occupation in traditional medicine were important, mainstream medicine put its emphasis on age, gender, sleep, BMI, (and other physiologic parameters), lifestyle habits

(nutrition, physical activity, not smoking, not drinking alcohol, self and stress management) [28,29] that should be focused to prevent from diseases [30-32]. What we aimed to focus in this study is the primary prevention rather than the two other prevention and its associated measures.

## Primary preventive measures

Primary prevention aims to prevent disease or injury before it occurs. This is done by preventing exposures to risks triggering disease or injury, changing unhealthy or unsafe behaviours that can lead to disease or injury, and increasing resistance to disease or injury. It includes: 1) Training healthy and safe habits: training healthy lifestyle factor emphasized to: a) prevent from obesity, central obesity, and diabetes [33]; 2) To control blood pressure and lipid management and to use evidence-based medications [34]. Healthy lifestyle factors and risk factor control are consisted of [35]: 1) Nutrition (nonhydrogenated unsaturated fats, grains consumption as the main form of carbohydrates, large portion of of fruits and vegetables, calorie intake reduction, and adequate omega-3 fatty acids [36,37], using medicinal plants [38,39], regular physical activity [40,41], not smoking) [42,43], maintaining healthy weight (body mass index 18.5-29.9 kg/m<sup>2</sup>) [44], not being stressful. 2) Immunization against diseases: a) vaccination; b) drug consumption; c) dietary supplementations (like probiotic, folic acid supplements, vitamins, antioxidants [52-58]).

## LIMITATION

A limitation of this systematic review was the potential bias due to the research strategy. Another limitation was related to the language of most of the book in this area (Arabic texts mostly), that made it difficult, using them in this manuscript.

## CONCLUSION

There are two difference between these two kinds of medicine: firstly, although some preventive factors are overlapped in traditional and mainstream medicines {including nutrition (both food and drink), physical activity, sleep}, some of the traditional preventive factors become undelined (retention, air) and some new preventive factors get highlighted in mainstream medicine (e.g., not smoking, not having stress, etc.); secondly, rules of preventive medicine in Unani system were mentioned in detail and were different for different people with different types of temperament, while the mainstream medicine state its rules generally for different types of people.

## EDITORIAL NOTE

The following review belongs to the field of Alternative Medicine and during the process of peer review we received conflicting opinion regarding the suitability of the article for the journal. However, the Editorial had a broader prospective and we thought of moving ahead with it, as on including this article it might broaden our reach to the readers of Alternative Medicine and also widen the concept of traditional medicine. We thought to let the readers judge the usefulness of such strategies. Best example is Yoga and meditation that have now found a place of their own in the field of main stream medicine and we hope that the field of Holistic Medicine will have an advantage to the people in future.

## REFERENCES

- [1] Lone AH, Ahmad T, Anwar M, Sofi G, Imam H, Habib S. Perception of health promotion in Unani herbal medicine. *Journal of Herbal Medicine*. 2012;2(1):1-5.
- [2] Bhika R, Haq HMA. Tibb traditional roots of medicine in modern routes to health: *Mountain of Light SA*; 2000.
- [3] Sina I. Al-Qanun fi al-Tibb [The Canon of Medicine]. Beirut, Lebanon: Alaalami Library. 2005.
- [4] Chishti SHM, Moinuddin AAG. Book of Sufi Healing. Inner Traditions International Rochester, VT; 1991. Pp. 43.
- [5] Aijaz AAA. The aetiology and prevention of osteoporosis in greek-o-arabic (unani) medicine. *Global Journal of Medical Research*. 2013;13(2).

- [6] Sina I. Kuliyate Qanoon. by Hakim Kabeeruddin, Shaikh Md Basheer & Sons, Part-2, Lahore, YNM. 1930:258-97.
- [7] Azmi AA. Basic Concepts of Unani Medicine: A Critical Study. New Delhi: Department of History of Medicine, Faculty of Medicine, *Jamia Hamdard*. 1995.
- [8] Ansari AH, Zulkifle M, Ali M. An analytical study of concordance between Mizaj and diseases in adult patients of NIUM Hospital, Bangalore. *Ancient Science of Life*. 2010;30(1):7.
- [9] Alizadeh M, Keshavarz M, Ebadiani M, Nazem E, Isfahani MM. Complexity and rationality of Avicenna's pulsology: a step towards understanding the past for today's applications. *International Journal of Cardiology*. 2012;157(3):434-35.
- [10] Youseffard M, Parviz M, Hosseini M, Ebadiani M, Keshavarz M. Mizaj; past, present and future. *Physiology and Pharmacology*. 2013;16(4):328-39.
- [11] Esfahani MM. ganjine maghalat e montakhab (international society for the history of Islamic medicine). Iran: *Iranian University of Medical Sciences*. 2013.
- [12] Moradi H, Minaii B, Nikbakht Nasrabadi A, Siahpoosh M-B. Avicenna viewpoint about health preservation through healthy nutrition principles. *Iran J Public Health*. 2013;42(2):220-21.
- [13] Patwardhan, Bhushan, et al. "Ayurveda and traditional Chinese medicine: a comparative overview." *Evidence-Based Complementary and Alternative Medicine* 2.4 (2005): 465-473.
- [14] Chopra A, Doiphode VV. Ayurvedic medicine: core concept, therapeutic principles, and current relevance. *Medical Clinics of North America*. 2002;86(1):75-89.
- [15] ERDEMIR AD. The application of ayurvedic therapies in turkey and the importance of ginger use from the point of view of ayurvedic principles. *JISHIM*. 2003:2.
- [16] Bhikha R, editor The role of Unani in lifestyle diseases. International Conference on Holistic Approach of Unani Medicine in Lifestyle Diseases, Aligarh Muslim University, India; 2007.
- [17] Kannan R, editor Siddha System. Medical systems with a holistic approach: proceedings of a seminar-cum-workshop; 1993: Prof. SN Tripathi Memorial Foundation.
- [18] Mohammad-Al-Karim Ezbavi, Al-Mojej Fil-Tibb, Tehran university press, 607-687, p.20-33.
- [19] CNOC KO. Tabular From In Four Arabic Medical Texts From The 11<sup>th</sup> Century: Taqwiyim alsiha, cairo, 1050( date), Ibn buTaan. *JISHIM*. 2002:2.
- [20] Mohammad-Ibn-Mahmoud Al-Ghaghmini Al-Kharazmi, Al-Ghanoonche-fil-Tibb, 751. pp.145-170.
- [21] Siahpoosh M-B, Ebadiani M, Hosseini GS, Dadgostar H, Isfahani MM, Nasrabadi AN. Sudden cardiac death and its prevention ways among athletes according to iranian traditional medicine. *Iranian Journal of Public Health*. 2013;42(3):344.
- [22] Siahpoosh M, Ebadiani M, Hosseini GS, Isfahani M, Nasrabadi AN, Dadgostar H. Avicenna the first to describe diseases which may be prevented by exercise. *Iranian Journal of Public Health*. 2012;41(11):98.
- [23] Siahpoosh M, Ebadiani M, Shah Hosseini G, Nejatbakhsh F. Ancient theory about public health through Physical activity against hyperlipidemia and Ischemic Heart Disease. *Iranian J Publ Health*. 2012;41(10):103-04.
- [24] Feyzabadi Z, Jafari F, Feizabadi PS, Ashayeri H, Esfahani MM, Aval SB. Insomnia in Iranian Traditional Medicine. *Iranian Red Crescent Medical Journal*. 2014;16(3).
- [25] Nimrouzi M, Mahbodi A, Jaladat A-M, Sadeghfard A, Zarshenas MM. Hijamat in Traditional Persian Medicine Risks and Benefits. *Journal of evidence-Based Complementary & Alternative Medicine*. 2014;2156587214524578.
- [26] Long, Bonita C. "Sex-role orientation, coping strategies, and self-efficacy of women in traditional and nontraditional occupations." *Psychology of Women Quarterly* 13.3 (1989): 307-324.
- [27] Verbrugge, Lois M. "Sex and gender in health and medicine." *Social Science & Medicine*. Part A: Medical Psychology & Medical Sociology 12 (1978): 329-333.
- [28] Puckett M, Neri A, Underwood JM, Stewart SL. Nutrition and Physical Activity Strategies for Cancer Prevention in Current National Comprehensive Cancer Control Program Plans. *Journal of Community Health*. 2016.
- [29] Warren Andersen S, Blot WJ, Shu XO, Sonderman JS, Steinwandel MD, Hargreaves MK, et al. Adherence to cancer prevention guidelines and cancer risk in low-income and African American populations. *Cancer epidemiology, biomarkers & prevention* : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology. 2016.
- [30] Melchart D, Eustachi A, Wellenhofer-Li Y, Doerfler W, Bohnes E. Individual Health Management - A Comprehensive Lifestyle Counselling Programme for Health Promotion, Disease Prevention and Patient Education. *Forschende Komplementarmedizin*. (2006). 2016;23(1):30-5.
- [31] Miller A, Franzen-Castle L, Aguirre T, Krehbiel M, Colby S, Kattelmann K, et al. Food-Related Behaviour and Intake of Adult Main Meal Preparers of 9-10 Year-Old Children Participating in iCook 4-H: A Five-State Childhood Obesity Prevention Pilot Study. *Appetite*. 2016.
- [32] Leng J, Liu G, Zhang C, Xin S, Chen F, Li B, et al. Physical Activity, Sedentary Behaviours and Risk of Gestational Diabetes Mellitus: A Population-Based Cross-Sectional Study in Tianjin, China. *European journal of endocrinology / European Federation of Endocrine Societies*. 2016.
- [33] Nasri H, Rafeian-Kopaei M. Diabetes mellitus and renal failure: Prevention and management. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*. 2015;20(11):1112-20.
- [34] Rafeian-Kopaei M, Shahinfard N, Rouhi-Boroujeni H, Gharipour M, Darvishzadeh-Boroujeni P. Effects of Ferulago angulata Extract on Serum Lipids and Lipid Peroxidation. Evidence-based complementary and alternative medicine: eCAM. 2014;2014:680856.
- [35] Kotseva K, De Bacquer D, Jennings C, Gyberg V, De Backer G, Ryden L, et al. Time Trends in Lifestyle, Risk Factor Control, and Use of Evidence-Based Medications in Patients With Coronary Heart Disease in Europe: Results From 3 EUROASPIRE Surveys, 1999-2013. *Global heart*. 2016.
- [36] Hu FB, Willett WC. Optimal diets for prevention of coronary heart disease. *Jama*. 2002;288(20):2569-78.
- [37] Afman L, Müller M. Nutrigenomics: from molecular nutrition to prevention of disease. *Journal of the American Dietetic Association*. 2006;106(4):569-76.
- [38] Shaygani E, Bahmani M, Asgary S, Rafeian-Kopaei M. Inflammation and cardiovascular disease: Management by medicinal plants. *Phytomedicine : International Journal of Phytotherapy and Phytopharmacology*. 2015.
- [39] Baradaran A, Nasri H, Nematbakhsh M, Rafeian-Kopaei M. Antioxidant activity and preventive effect of aqueous leaf extract of Aloe Vera on gentamicin-induced nephrotoxicity in male Wistar rats. *La Clinica Terapeutica*. 2014;165(1):7-11.
- [40] Pate RR, Pratt M, Blair SN, Haskell WL, Macera CA, Bouchard C, et al. Physical activity and public health: a recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *Jama*. 1995;273(5):402-07.
- [41] Berlin JA, Colditz GA. A meta-analysis of physical activity in the prevention of coronary heart disease. *American Journal of Epidemiology*. 1990;132(4):612-28.
- [42] Booth lli JN, Colantonio LD, Howard G, Safford MM, Banach M, Reynolds K, et al. Healthy lifestyle factors and incident heart disease and mortality in candidates for primary prevention with statin therapy. *International Journal of Cardiology*. 2016;207:196-202.
- [43] Bobes J, Arango C, Garcia-Garcia M, Rojas J. Healthy lifestyle habits and 10-year cardiovascular risk in schizophrenia spectrum disorders: an analysis of the impact of smoking tobacco in the CLAMORS schizophrenia cohort. *Schizophrenia Research*. 2010;119(1):101-09.
- [44] King DE, Mainous AG, Carnemolla M, Everett CJ. Adherence to healthy lifestyle habits in US adults, 1988-2006. *The American Journal of Medicine*. 2009;122(6):528-34.
- [45] Von Bothmer MI, Fridlund B. Gender differences in health habits and in motivation for a healthy lifestyle among Swedish university students. *Nursing & Health Sciences*. 2005;7(2):107-18.
- [46] Roohafza H, Sarrafzadegan N, Sadeghi M, Rafeian-Kopaei M, Sajjadi F, Khosravi-Boroujeni H. The association between stress levels and food consumption among Iranian population. *Archives of Iranian Medicine*. 2013;16(3):145-48.
- [47] Umar A. Cancer immunoprevention: a new approach to intercept cancer early. *Cancer prevention research (Philadelphia, Pa)*. 2014;7(11):1067-71.
- [48] Lollini PL, Nicoletti G, Landuzzi L, Cavallo F, Forni G, De Giovanni C, et al. Vaccines and other immunological approaches for cancer immunoprevention. *Current Drug Targets*. 2011;12(13):1957-73.
- [49] Lollini PL, Nicoletti G, Landuzzi L, De Giovanni C, Nanni P. New target antigens for cancer immunoprevention. *Current Cancer Drug Targets*. 2005;5(3):221-28.
- [50] Nanni P, Nicoletti G, Palladini A, Croci S, Murgio A, Antognoli A, et al. Antimetastatic activity of a preventive cancer vaccine. *Cancer Research*. 2007;67(22):11037-44.
- [51] Dimitriu-Leen AC, Scholte AJ, van Rosendaal AR, van den Hoogen IJ, Kharagitsingh AV, Wolterbeek R, et al. Value of Coronary Computed Tomography Angiography in Tailoring Aspirin Therapy for Primary Prevention of Atherosclerotic Events in Patients at High Risk With Diabetes Mellitus. *The American Journal of Cardiology*. 2016;117(6):887-93.
- [52] Kraft K. Complementary/Alternative Medicine in the context of prevention of disease and maintenance of health. *Preventive Medicine*. 2009;49(2-3):88-92.
- [53] Doron S, Gorbach SL. Probiotics: their role in the treatment and prevention of disease. *Expert Review of Anti-Infective Therapy*. 2006;4(2):261-75.
- [54] Hashemi A, Villa CR, Cornelli EM. Probiotics in early life: a preventative and treatment approach. *Food & Function*. 2016.
- [55] Molloy AM, Scott JM. Folate and prevention of disease. *Public Health Nutrition*. 2001;4(2b):601-9.
- [56] Fairfield KM, Fletcher RH. Vitamins for chronic disease prevention in adults: scientific review. *Jama*. 2002;287(23):3116-26.
- [57] Rafeian-Kopaei M. In vitro evaluation of antioxidant properties of ten Iranian medicinal plants. *Iranian Red Crescent Medical Journal*. 2014;16(6):e10264.
- [58] Nasri H, Rafeian-Kopaei M. Oxidative stress and aging prevention. *International Journal of Preventive Medicine*. 2013;4(9):1101-02.

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